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Approved for use through 10/31/2002, OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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## UTILITY PATENT APPLICATION

MTB31US Attorney Docket No. First Inventor Kia Silverbrook
THERMAL INK JET PRINTHEAD WITH BUBBLE **NUCLEATION LATERALLY OFFSET FROM NOZZLE** 

TRANSMITTAL Express Mail Label No. (Only for new nonprovisional applications under 37 CFR 1.53(b)) Assistant Commissioner for Patents **APPLICATION ELEMENTS** ADDRESS TO: **Box Patent Application** See MPEP chapter 600 concerning utility patent application contents. Washington, DC 20231 Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or (Submit an original and a duplicate for fee processing, Computer Program (Appendix) Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) preferred arrangement set forth below)

- Descriptive title of the invention

- Cross Reference to Descriptive title of the invention Specification 3. X Computer Readable Form (CRF) b. Specification Sequence Listing on: Cross Reference to Related Applications i. ☐ CD-ROM or CD-R (2 copies); or Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, ii.□ paper or a computer program listing appendix Statements verifying identity of above copies - Background of the Invention Brief Summary of the Invention **ACCOMPANYING APPLICATION PARTS**  Brief Description of the Drawings (if filed)
 Detailed Description 9. X Assignment Papers (cover sheet & document(s)) - Claim(s) 37 CFR 3.73(b) Statement Power of - Abstract of the Disclosure (when there is an assignee) Attorney English Translation Document (if applicable) Drawing(s) (35 U.S.C. 113) [ Total Sheets 66 ] Copies of IDS Information Disclosure 5. Oath or Declaration [Total Pages 2 ] Citations Statement (IDS)/PTO-1449 Newly executed (original or copy) Copy from a prior application (37 CFR 1.63 (d)) (for continuation/divisional with Box 17 completed) **Preliminary Amendment** Return Receipt Postcard (MPEP 503) (Should be specifically itemized) DELETION OF INVENTOR(S) Certified Copy of Priority Document(s) (if foreign priority is claimed) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). Application Data Sheet. See 37 CFR 1.76 17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: 10 / 302,274 of prior application No.:\_ Continuation Divisional X Continuation-in-part (CIP) 2853 Group / Art Unit: \_ For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 18. CORRESPONDENCE ADDRESS 24011 Customer Number or Bar Code Label Correspondence address below **KIA SILVERBROOK** Name 393 Darling Street, Address City Balmain State **NSW** Zip Code 2041 Country Australia Telephone +61-2-9818-6633 Fax +61-2-9555-7762 **KIA SILVERBROOK** Name (Print/Type) Registration No. (Attorney/Agent) Date January 28, 2004

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PTO/SB/17 (10-03)
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f FEE TRANSMITTAL			C mplete if Known						
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for FY 2004			Filing Date						
Effective 10/01/2003. Patent fees are subject to annual revision.			First Named Inventor K		ntor Kia	a Silv	erbrook		
			Examiner Name						
Applicant claims small entity status. See 37 CFR 1.27		Art Unit							
TOTAL AMOUNT OF PAYMENT (\$) 1,422.00	Attorney Docket No. MTB31US								
METHOD OF PAYMENT (check all that apply)		FEE CALCULATION (continued)							
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1. BASIC FILING FEE	1252	420	2252	210	Extension	n for re	ply within se	cond month	
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1002 3 0 2002 1 Design filing fee 770.00	1401	330	2401	165	Notice of	Appea	ıl		
1003 5 0 2003 265 Plant filing fee	1402	330	2402	165	Filing a b	rief in s	support of ar	n appeal	
1004 7 0 2004 3 5 Reissue filing fee	1403	290	2403	145	Request f	for oral	hearing		
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to	o institu	ıte a public ι	use proceeding	
SUBTOTAL (1) (\$) 770.00	1452	110	2452	55	Petition to	o revive	e - unavoidal	ble	
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*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00								)	
SUBMITTED BY (Complete (if applicable))									
Name (Print/Type) Kia Silverbrook	Registration No. (Attorney/Agent) Telephone 612 98186633								
Signature		AUDITION A	AUBIIU	<u> </u>			Date	January 28, 20	004

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



## SILVERBROOK RESEARCH Pty Ltd

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February 6, 2004

Commissioner of Patents and Trademarks Washington DC 20231 USA

Dear Sir

22 New United States Patent Applications Assignee: Silverbrook Research Pty Ltd

This letter accompanies 22 new patent applications.

One bank draft for the total amount of US\$31,094 is enclosed to cover filing and assignment fees for each of the 22 applications. Also attached is a list giving details of each application.

We look forward to receiving filing receipts in due course.

If you need to contact us in relation to the applications, please email my assistant, Leonie News at leonie.news@silverbrookresearch.com or by fax to +61 2 9555 7762.

Yours faithfully

Kia Silverbrook

Silverbrook Research Pty Ltd

kia.Silverbrook@silverbrookresearch.com

	NO.	TITLE	INVENTORS	AMOUNT
1	MTB15	Thermal Ink Jet Printhead with Unintentional Boiling Prevention	Kia Silv rbrook	1422
2	MTB16	Thermal Ink Jet Printhead with Small . Nozzle Dimensions	Kia Silverbrook	1422
3	MTB18	Thermal Ink Jet Printhead with Bubble Collapse Point Void	Kia Silverbrook	1422
4	MTB19	Thermal Ink Jet Printhead with Reduced Pressure Transients	Kia Silverbrook	1422
5	MTB20	Thermal Ink Jet Printhead with Laterally Enclosed Heater Element	Kla Silverbrook	1422
6	MTB21	Laminated Structure for the Alighment and Funneling of Ink	Kia Silverbrook	1422
7	MTB22	Thermal Ink Jet Printhead with Drive Circuitry on Opposing Sides of Chamber Thermarmic Jet i Indicad with Suspended	Kia Silverbrook	1422
8	MTB23	Heater Element Spaced from Chamber Walls	Kia Silverbrook	1422
9	MTB24	Thermal Ink Jet Printhed with Drive Circuitry Offset From Heater Elements	Kia Silverbrook	1422
10	MTB25	Thermal Ink Jet Printhead with Heater Element Having Non-Uniform Resistance	Kla Silverbrook	1422
11	MTB26	Thermal Ink Jet Printhead with Heater Element that Forms Symmetrical Bubbles	Kia Silverbrook	1422
12	MTB27	Thermal Ink Jet Printhead with Wide Heater Element	Kia Silverbrook	1422
13		Element Mounted to Opposing Sides of the	Kia Silverbrook	1422
14	MTB29	Thermal Ink Jet Printhead with Heater Element Symmetrical About Nozzle Axis	Kia Silverbrook	1422
15	МТВ30	Thermal Ink Jet Printhead with Bubble Nucleation Offset from Ink Supply	Kia Silverbrook	1422
16		Thermal Ink Jet Printhead with Bubble Nucleation Laterally Offset from Nozzle	Kia Silverbrook	1422
17	МТВ32	Thermal Ink Jet Printhead with Low Resistance Connection to Heater	Kia Silverbrook	1422
18		Thermal Ink Jet printhead With Non- Buckling Heater Element	Kia Silverbrook	1422
19		Thermal Ink Jet PRInthead with Rotatable Heater Element	Kia Silverbrook	1422
20	MTB36		Kia Silverbrook	1422
21		Thermal Ink Jet Printhead with Bubble Formation Surrounding Heater Element	Kia Silverbrook, AJ North & GJ McAvoy	1,502
22		Inkjet Printhead with CMOS Drive Circuitry Close to Ink Supply Passage	Kia Silverbrook	1,152
			TOTAL	31,094